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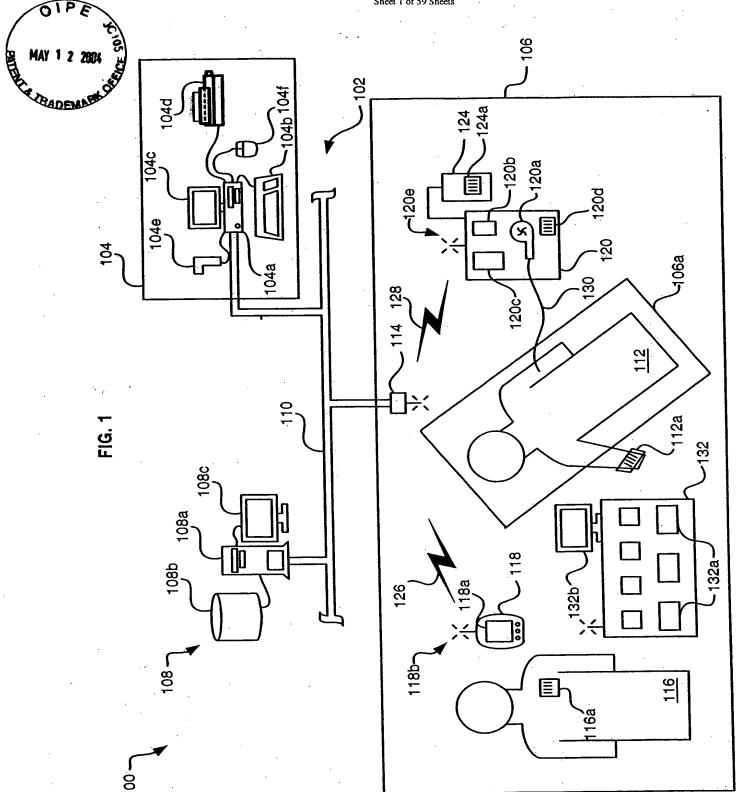
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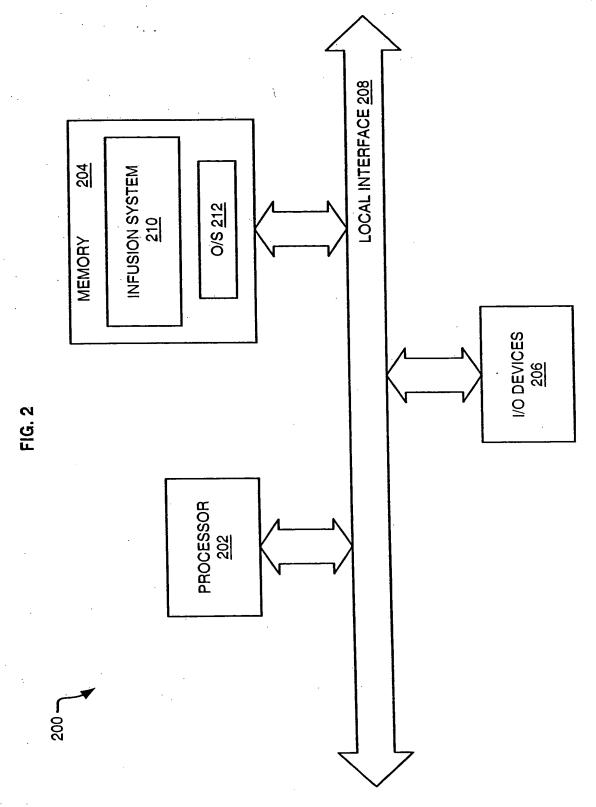
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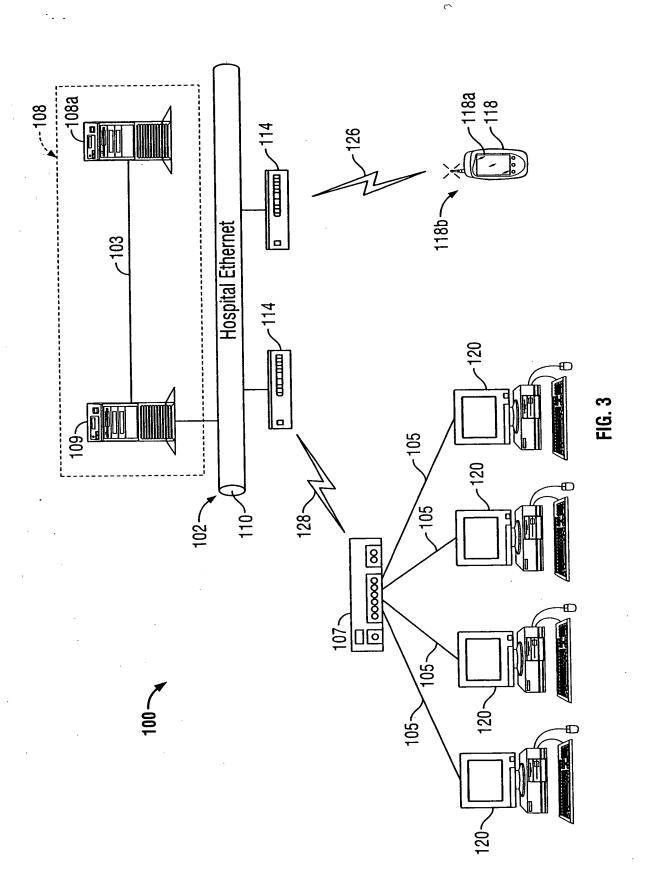
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Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 1 of 59 Sheets



Inventors: Dan M. Mihai et al.
Application No.: 107/49,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 2 of 59 Sheets







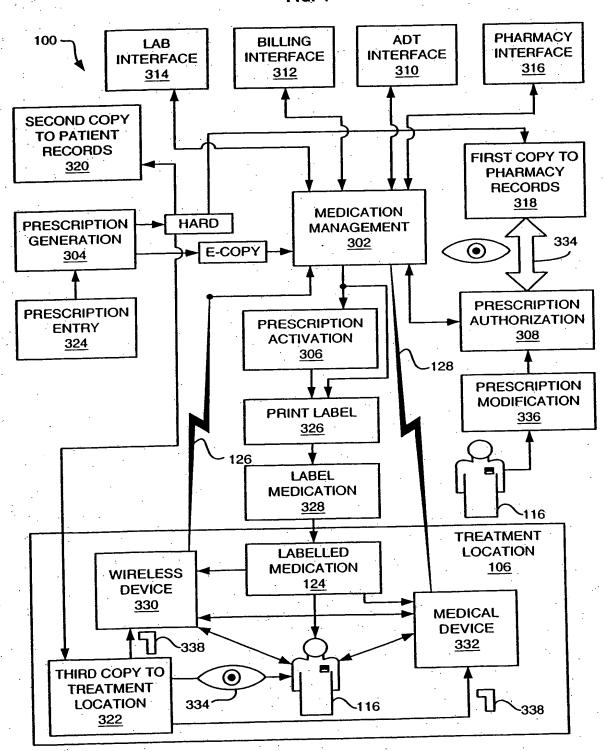
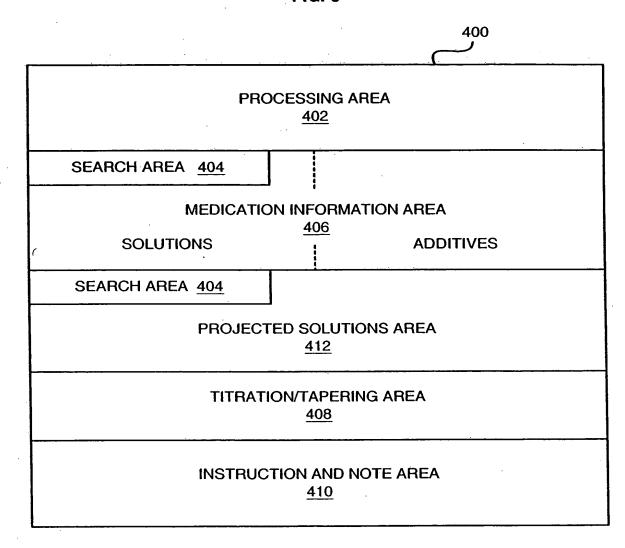


FIG. 5



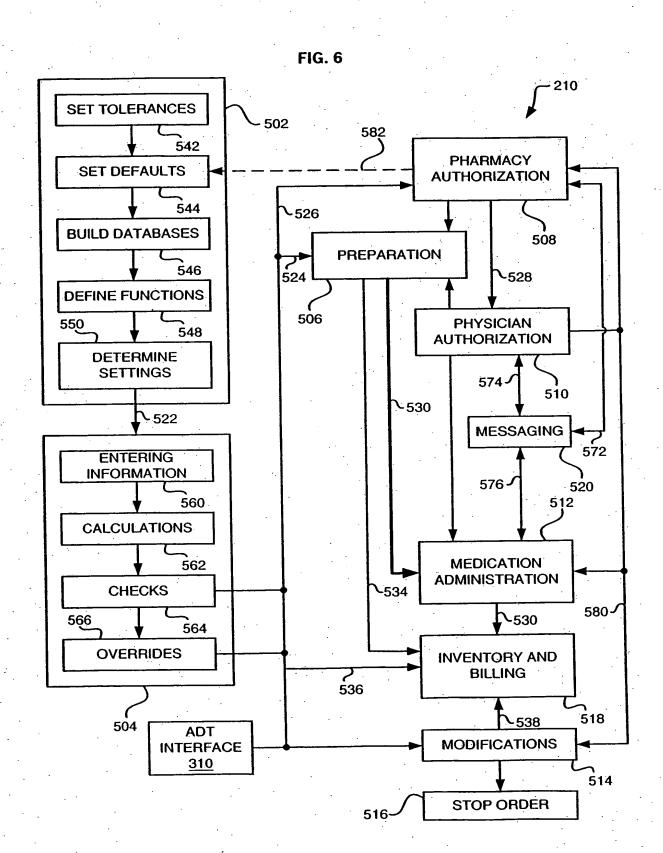
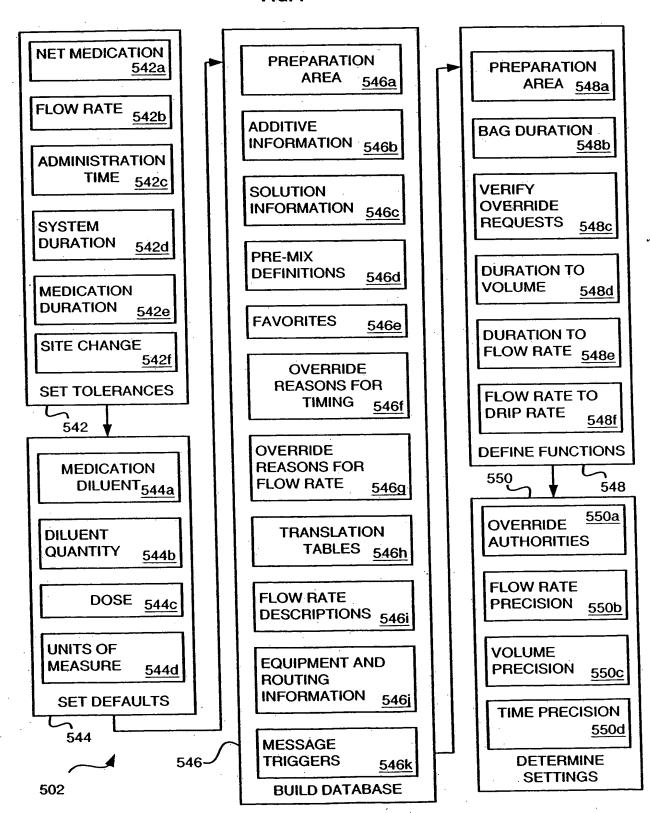
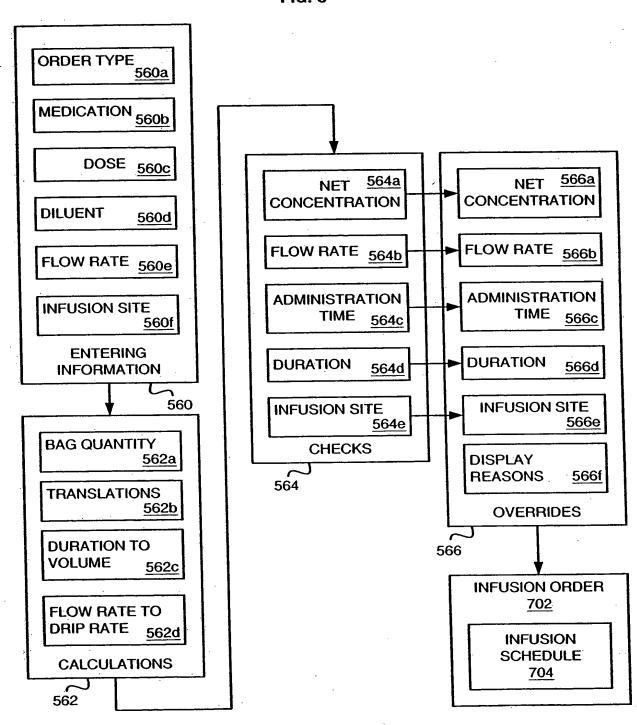


FIG. 7



Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 8 of 59 Sheets

FIG. 8





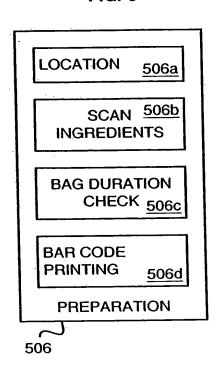
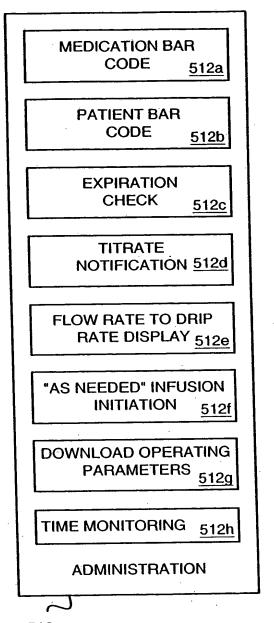
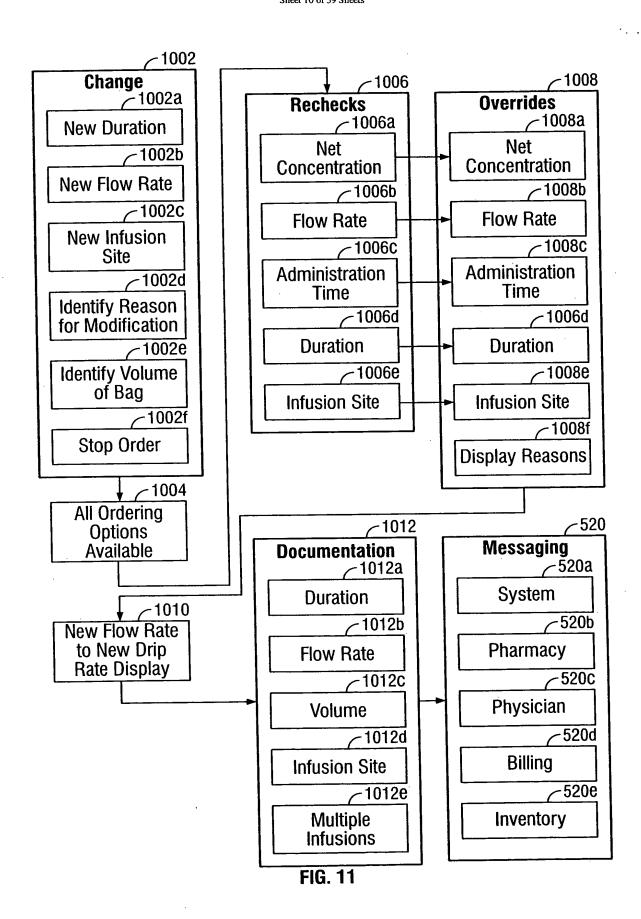
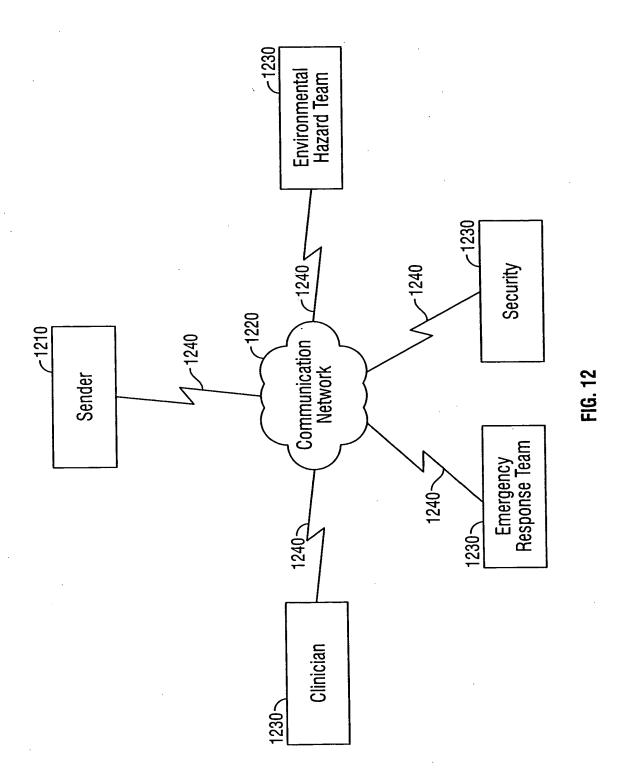


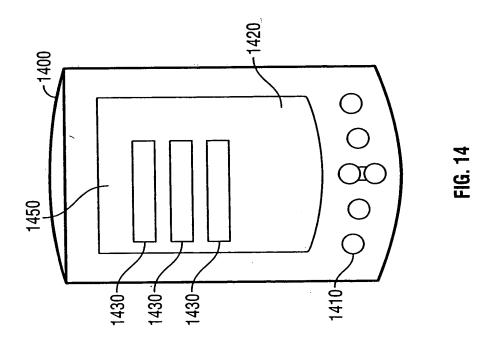
FIG. 10

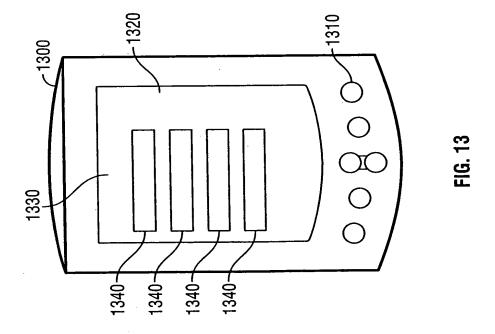


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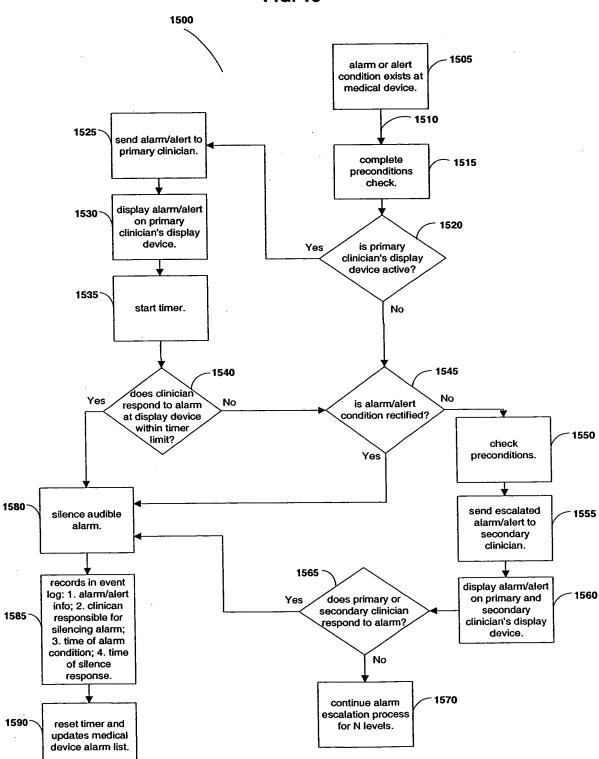






Sheet 13 of 59 Sheets





Inventors: Dan M. Mihai et al.
Application No.: 107749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 14 of 59 Sheets

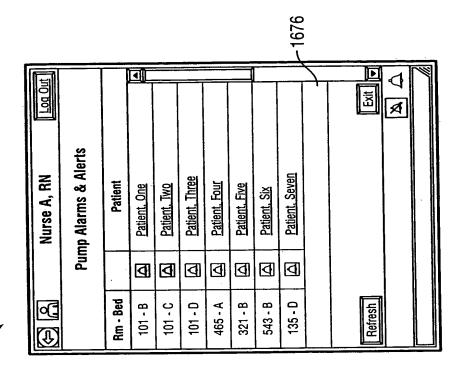
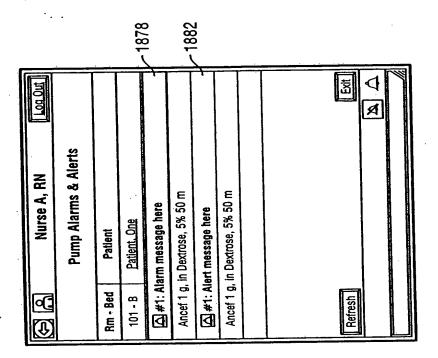


FIG. 16B

668 -1666 -1664 -4872 Pump Alarms & Alerts Patient, Three-Patient One-Patient, Two-Nurse A, RN Patient <u>a</u> ₫ ₫

Rm - Bed 101 - B 101 - C 101 - D

Inventors: Dan M. Mihai et al.
Application No.: 10749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 15 of 59 Sheets



4819 Refresh

Inventors: Dan M. Mihai et al.
Application No.: 10749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 16 of 59 Sheets

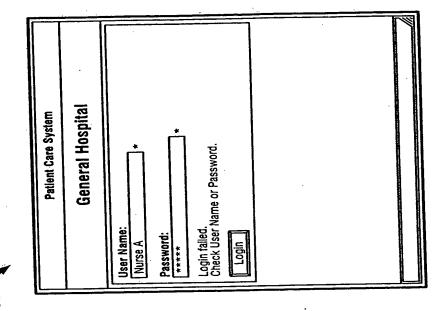
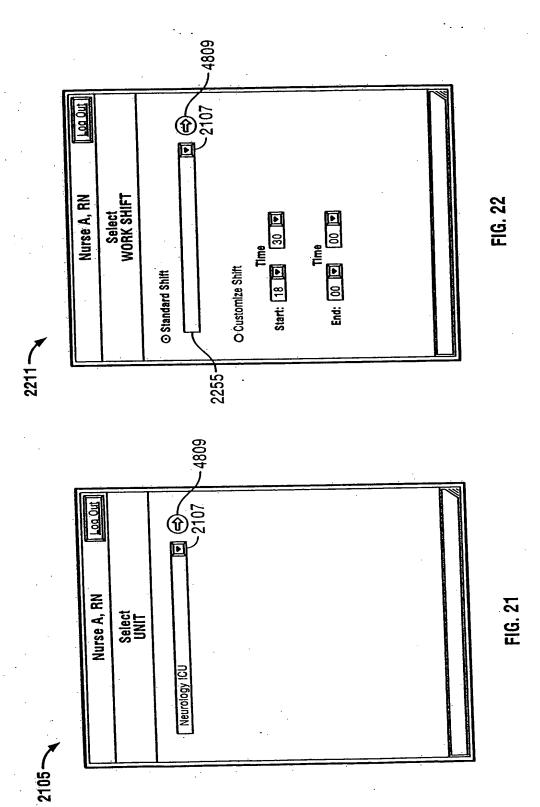
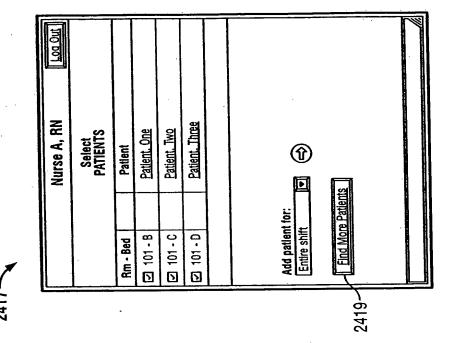


FIG. 20

General Hospital Patient Care System User Name: Password: Nurse A

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 17 of 59 Sheets





1 Nurse A, RN Patient, One **Patlent** My Patients Scan Patient: 101 - 8 101 - C Rm - Bed

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System

Sheet 19 of 59 Sheets

Ninety-Three, James RN Ninety Nine, Douglas, Mr. (MDLOC1) MDUnit1: MDRoom1 - MDBed1 Dr.Ninety, Susan 183.00 cm 72.05 in. Med HX Feigh Mini-Chart: Allergies Allergies & Ht/Wt Date Observed General Allergy Lab Results Acetaminophen 8-22 14:16 **Drug Allergy**

FIG. 25A

Nurse A, RN Mini-Chart: Allergies(NKA) Patient, One - 101-B Remove Patient from Flow Rate History Pump Status

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 20 of 59 Sheets

5/16/2003 9:00:00 AM Date Ninety-Three, James RN Normal ≨ Ninety- Nine, Douglas, Mr. (MDLOC1 MDUnit1: MDRoom1 - MDBed1 Range 3.6-5 mmol/L Alleraies & HVWt Med Hx Result Mini-Chart Allergies Dr.Ninety, Susan 3.1 POTASSIUM Lab Test

FIG. 25C

Ninety-Three, James RN Ninety Nine, Douglas, Mr. (MDLOC1 MDUnit1: MDRoom1 - MDBed1 Dr.Ninety, Susan PRN O Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral Look Back Period: 24 <u> Aini-Chart</u> Allergies (NKA) Allergies & HVWt Med Hx Scheduled O Admin Date: 6-3 12:53 Patient Refused Lab Results All O Order

FIG. 25B

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 21 of 59 Sheets

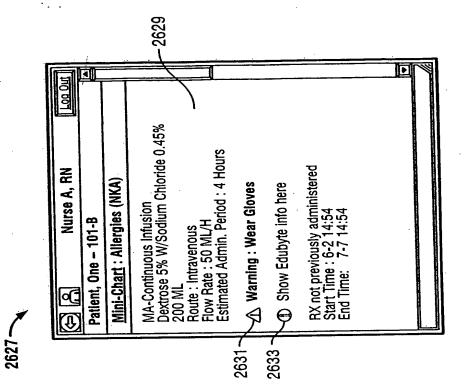


FIG. 26A

2625 12:19 -> Continuous Infusion (De SI Continuous Infusion (De Continuous Infusion (De SI MORPHINE SULFATE Continuous Infusion Nurse A, RN Mini-Chart: Allergies (NKA) SCHED 13 Patient, One - 101-B <- 10:19 **①** Med 17:30 13:30 15:30 11:30 Time I ¥ R 0

Please select a reason for Stop Infusion

Discontinue order in system Stop Time [M/D/Y HH:MM] 06/18/2003

Ninety-Three, James RN

WORKFLOW INFUSION: STOP Ninety-Six, Samuel, Mr. MDRoom1-MDBed1

Mini-Chart: Allergies

Continuous Infusion
Dextrose Inj 20%
500 ML
Route: Intravenous Flow Rate: 125
ML/H
Estimated Administration Period: 4
Hours

						 Files
3N 1.09 Out						
(S) A Ninety-Three, James RN	WORKFLOW INFUSION: STOP Ninety-Six, Samuel, Mr. MDRoom1- MDRed1	Mini-Chart: Allergies	Scan Item:	Continuous Infusion Dextrose Inj 20% 500 ML Route: Intravenous Flow Rate: 125 ML/H Estimated Administration Period:	4 Hours Order has been DC'd	Back to Patient list

FIG. 27B

Inventors: Dan M. Mihai et al.
Application No.: 10749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 23 of 59 Sheets

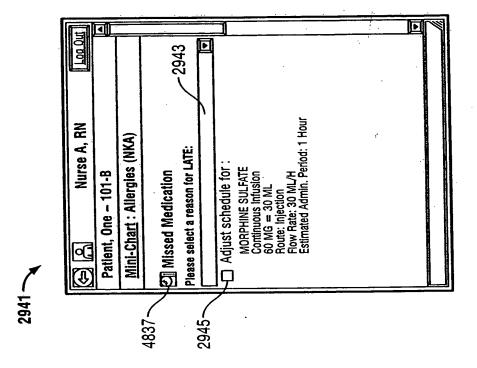
Ninety-Three, James RN WORKFLOW INFUSION: RESUME Ninetyfour-Pointlive, Fred, Mr. Mini-Chart: Allergies (Not Specified) Continuous Infusion
Dextrose Inj 20%
500 ML
Route: Intravenous Flow Rate:
125 ML/H
Estimated Administration Perfod:
4 Hours Stopped w/o Order Please select a reason for Resume Infusion ADRoom1 - MDBed1 Site re-established

FIG. 27D

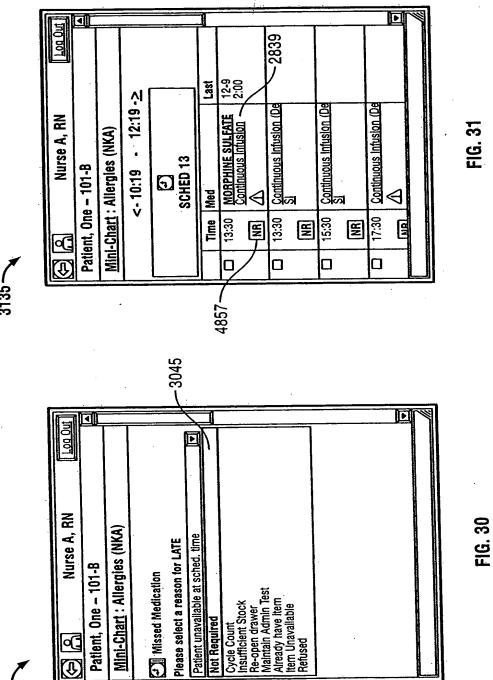
Ninety-Three, James RN WORKFLOW INFUSION: RESUME Ninetyfour-Pointlive, Fred, Mr. MDRoom1 - MDBed1 Continuous Infusion
Dextrose inj 20%
500 ML
Route: Intravenous Flow Rate: 125
ML/H
Estimated Administration Period: 4
Hours Mini-Chart: Allergies (Not Specified) Stopped w/o Order Scan Item:

FIG. 27C

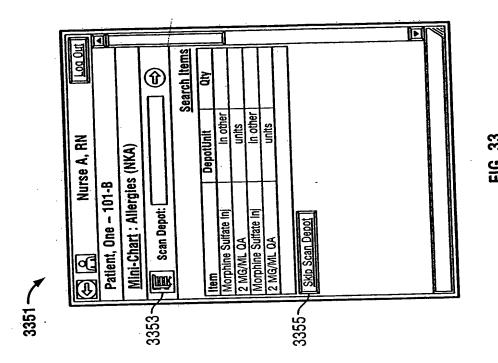
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Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 24 of 59 Sheets



Last Nurse A, RN Mini-Chart: Allergies (NKA) <- 10:19 SCHED 13 Patient, One - 101-B Med 17:30 13:30 13:30 15:30 Time Time



Inventors: Dan M. Mihai et al.
Application No.: 107749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 26 of 59 Sheets



Last Continuous Infusion (De Nurse A, RN SCHED 13 Med Time 15:30 17:30 11:30 13:30 N. R O

Inventors: Dan M. Mihai et al.
Application No.: 10749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 27 of 59 Sheets

Search Items In other In other units Nurse A, RN Mini-Chart: Allergies (NKA) Patient, One - 101-B Scan Depot: 2 MG/ML QA Morphine Sulfate Inj Scan code is invalid. Morphine Sulfate In

	Nurse A, RN	Too Out	
	Patient, Une - 101-b Mini-Chart : Allergies (NKA)		
	Scan ttem:	①	
467~	- MORPHINE SULFATE Continuous Infusion 60 MG = 30 ML Route: Injection Flow Rate: 30 ML/H Estimated Admin. Period: 1 Hour		
	Quantity: 30 ML(s) Get: 30 ML		
	 Warning: Wear Gloves Show Edubyte Info here 		
		D	D-70000

Inventors: Dan M. Mihai et al. Application No.: 10/749,099 Confirmation No.: 3169

Title: Separation of Validated Information and Functions in a Healthcare System

Sheet 28 of 59 Sheets

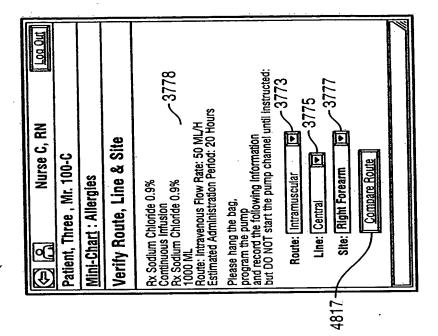


FIG 37

Patient, One – 101-B

Mini-Chart: Allergies (NKA)

About 3661

I Cannot admin, select a reason:

Refused

Refused

Waste/Return

FIG. 36

1657 -

Inventors: Dan M. Mihai et al. Application No.: 10/749,099 Confirmation No.: 3169

Title: Separation of Validated Information and Functions in a Healthcare System

Sheet 29 of 59 Sheets

Patient, Three , Mr. 100-C

Mini-Chart : Allergies

Scan Pump Channel

Rx Sodium Chloride 0.9%
Continuous infusion
Rx Sodium Chloride 0.9%
1000 ML
Route: Intravenous Flow Rate: 50 ML/H
Estimated Administration Period: 20 Hours
Scan Pump Channel ******* 🖘 4809

FIG. 38A

Rationt, Three, Mr. 100-C

Mini-Chart: Allergies

Select Pump Channel Mode

Rx Sodium Chloride 0.9%
Continuous Infusion
Rx Sodium Chloride 0.9%
Select Pump Channel Mode:
Select Pum

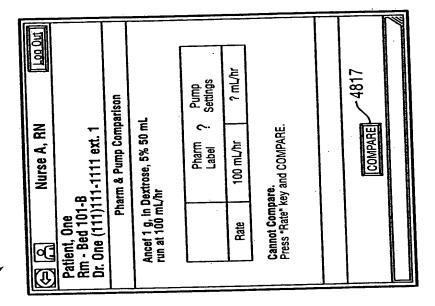
FIG. 38

3881-

100 mL/hr Pump Settings Pharm & Pump Comparison Ancef 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr 11 Nurse A, RN Patient, One Rm - Bed 101-B Dr. One (111)111-1111 ext. 1 100 mL/hr Pharm Label 乡 Comparison MATCHES. Press "Start" Key on pump. Rate

FIG. 39A

Elgyback Infusion, ensure PRIMARY is placed LOWER THAN an PRECYPACK and that PIGGYBACK roller clample OPEN. Continuous Infusion Rx Sodium Chloride 0.9% 1000 ML Route: Intravenous Floy, Bate: 60 ML il Estimated, Administration Periog: 20 Höurs Click COMPARE below Now and wait until instructed to start pump channel. Press the "start" key on the pump Now. then Click COMPARE 4817 Pharm & Pump Comparison Nurse C, RN Compare > If this is a PIGGYBACK --Program the Pump Channel and: > If this is a PRIMARY -Patient, Three, Mr. 1 West: 100-C MD1, Test



4825 Please Verify with PHYSICIAN Order.
Then to accept the mismatch, press "Start" key on pump and then click "OK" below.
You can also reprogram the pump and then click "Compare again." 481 50 mL/hr Compare again Pump Settings Pharm & Pump Comparison Ancef 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr # Nurse A, RN Patient, One Rm - Bed 101-B Dr. One (111)111-1111 ext. 1 100 mL/hr Pharm Label Š Rate

Inventors: Dan M. Mihai et al.
Application No.: 107749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System

Sheet 32 of 59 Sheets

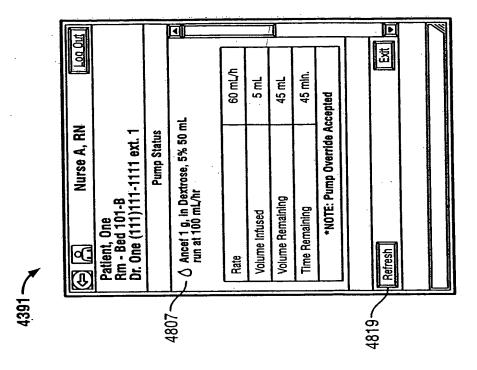


FIG. 43

FIG. 42

Cannot Compare. Press "Start" key on pump and click COMPARE, to retry comparison. ? mL/hr 4817 Pump Settings Pharm & Pump Comparison Ancef 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr Nurse A, RN Patient, One Rm - Bed 101-8 Dr. One (111)111-1111 ext. 1 100 mL/hr Pharm Label Rate

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 33 of 59 Sheets

Communication Loss Alert for the following Patients If a Yellow light is flashing on the WIRELESS MODULE and it is beeping, the system may be down. Call IT or Blomed. Plug in and turn on all pumps. If that does not resolve the problem, Call IT or Blomed. Nurse A, RN Patient Patient, Three Patient, One Patient, Two Trouble Shooting Tips: \boxtimes \boxtimes × Rm - Bed 101 - C 101 - D 101 - B

FIG. 45A

蓋 10:55 AM 3/13 10:55 AM 3/13 10:54 AM 3/13 Ancel 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr Flow Rate History Nurse A, RN Rm - Bed 101-8 Dr. One (111)111-1111ext. 1 000 60 mL/h 70 mL/h 80 mL/h Patient, One Refresh

Exit Œ Low Battery Alert for the following Patients Patient, One Plug WIRELESS MODULE into power outlet. Nurse A, RN Patient X Less than 30 minutes of battery left in WIRELESS MODULE. Œ Rm - Bed 101 - B Refresh

FIG. 46

100 001 EĶ Communication Loss Alert for the following Patients If a Yellow light is flashing on the WIRELESS MODULE and it is beeping, the system may be down. Call IT or Blomed. Plug in and turn on all pumps, If that does not resolve the problem, Call IT or Blomed. Nurse A, RN Patient Trouble Shooting Tips: Rm - Bed - OR -P-101 Refresh.

FIG. 45B

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 35 of 59 Sheets

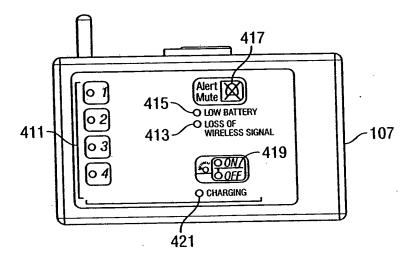


FIG. 47

Title: Separation of Validated Information and Functions in a Healthcare System Sheet 36 of 59 Sheets

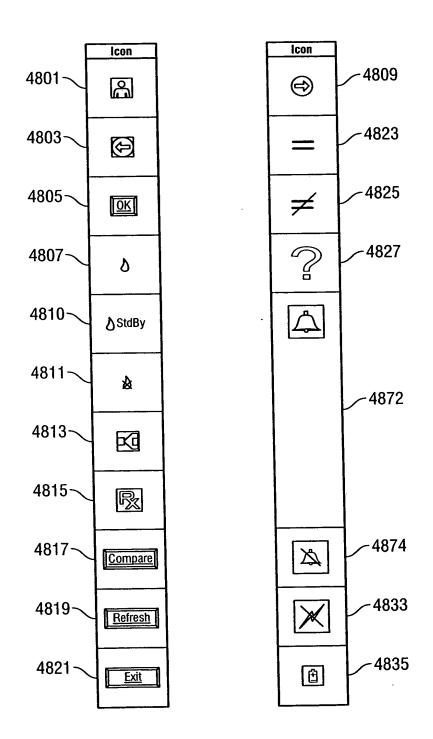
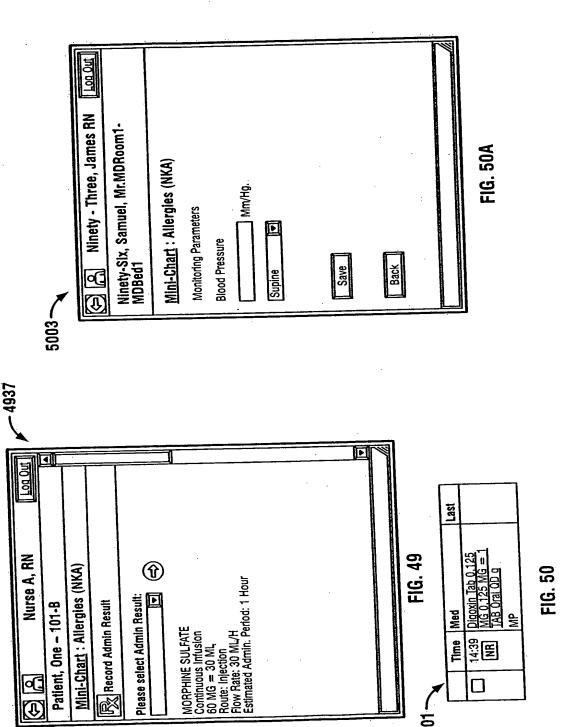


FIG. 48



5101 —

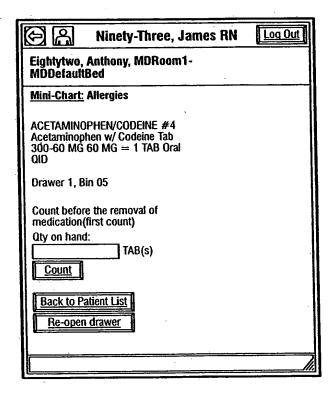
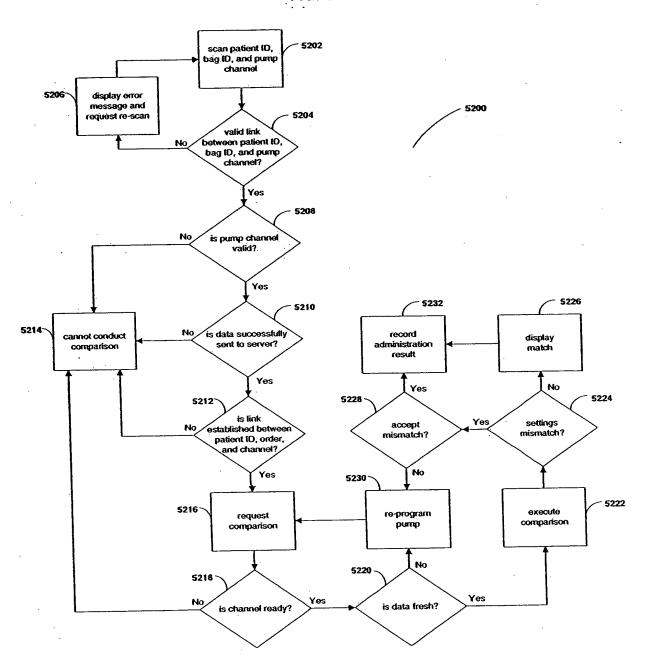


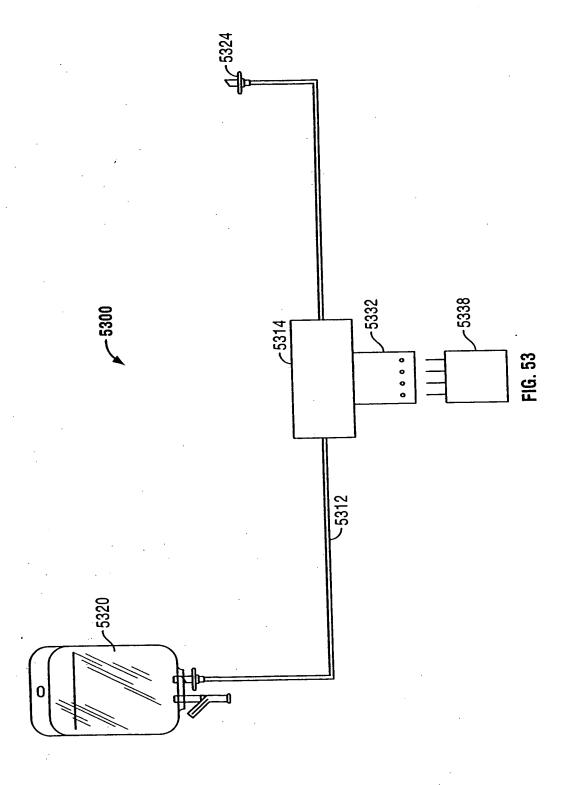
FIG. 51

Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 39 of 59 Sheets

FIG. 52



Inventors: Dan M. Mihai et al.
Application No.: 107749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 40 of 59 Sheets



Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 41 of 59 Sheets

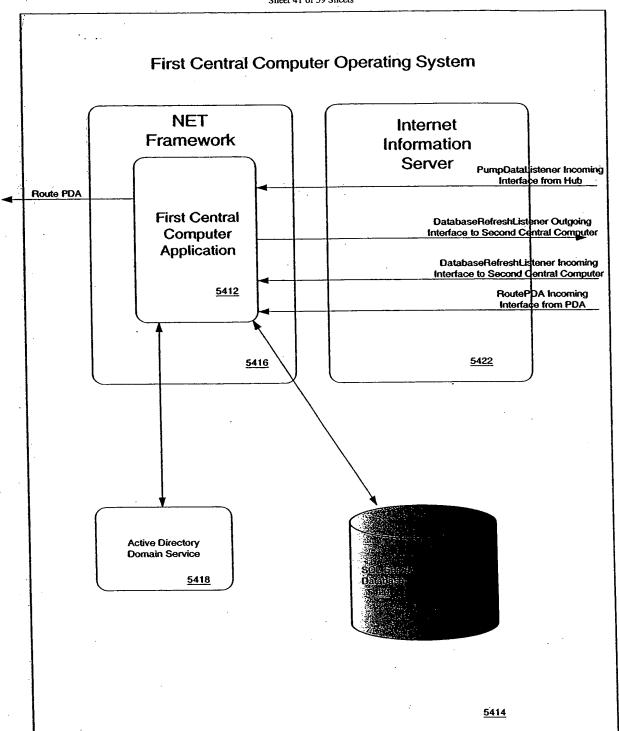
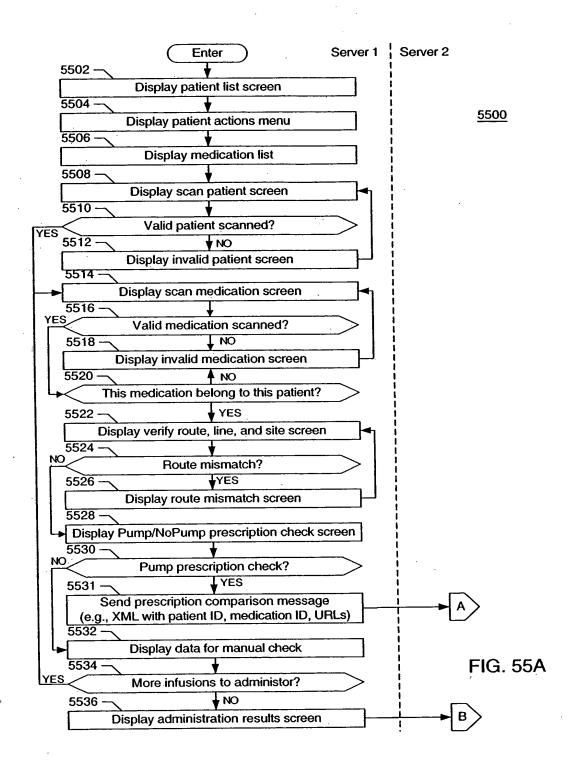
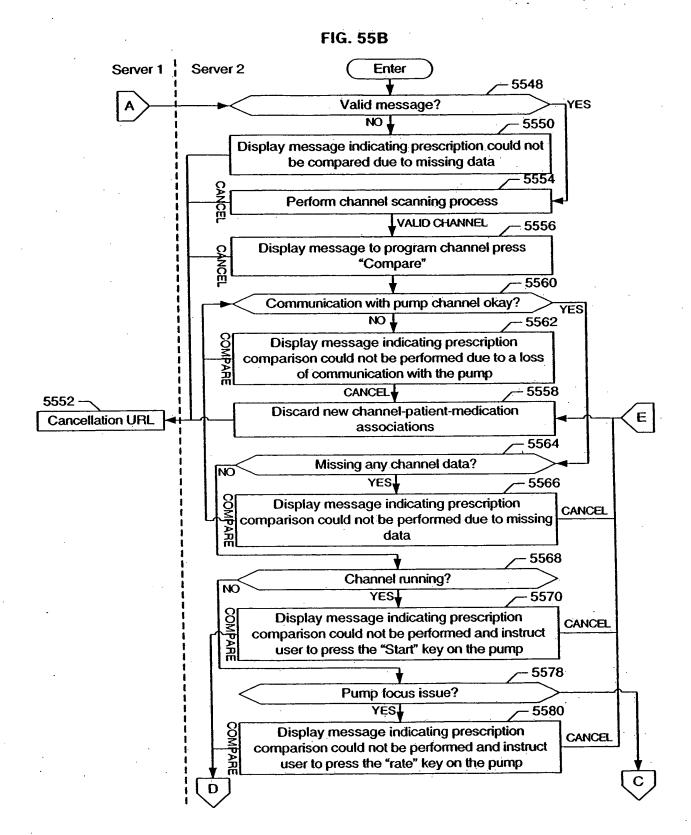


FIG. 54

Inventors: Dan M. Mihai et al.
Application No.: 10/749,099
Confirmation No.: 3169
Title: Separation of Validated Information and Functions in a Healthcare System Sheet 42 of 59 Sheets

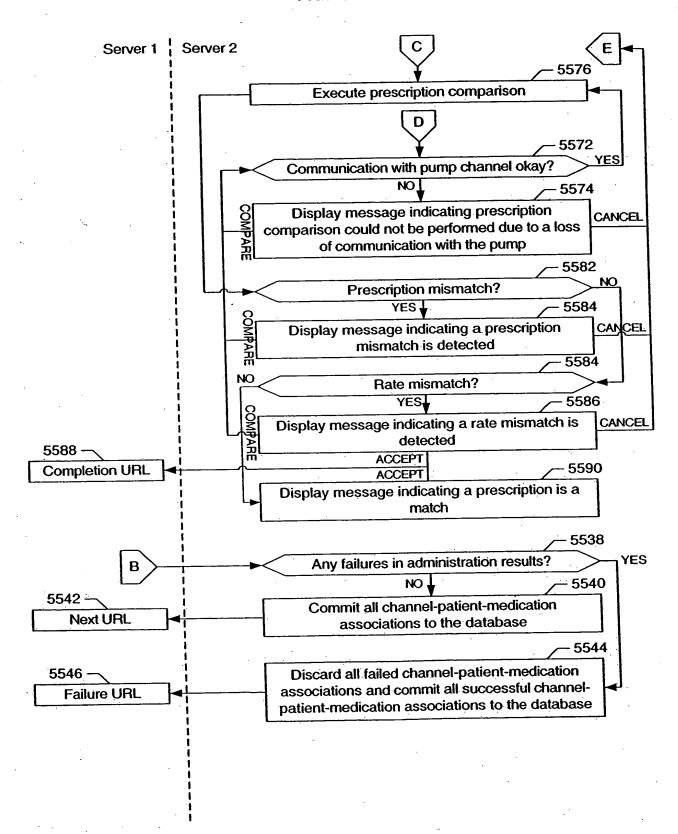


Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 43 of 59 Sheets

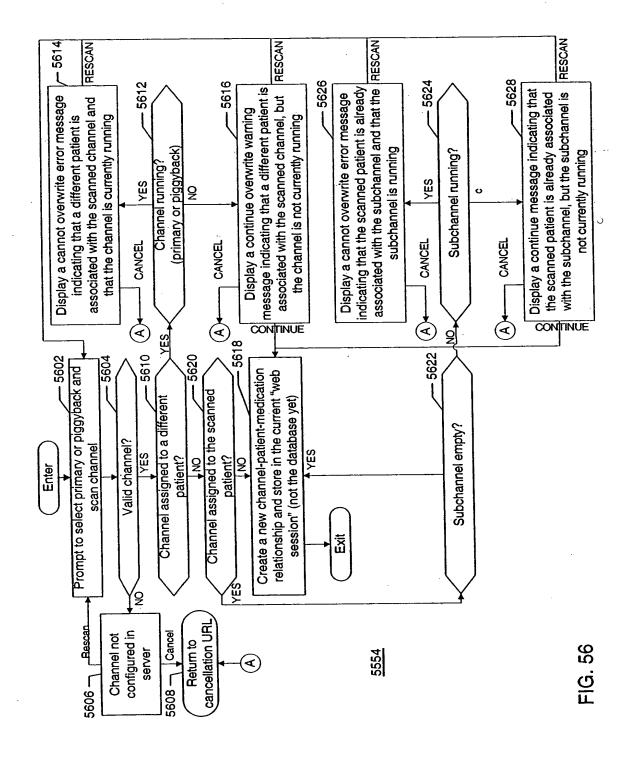


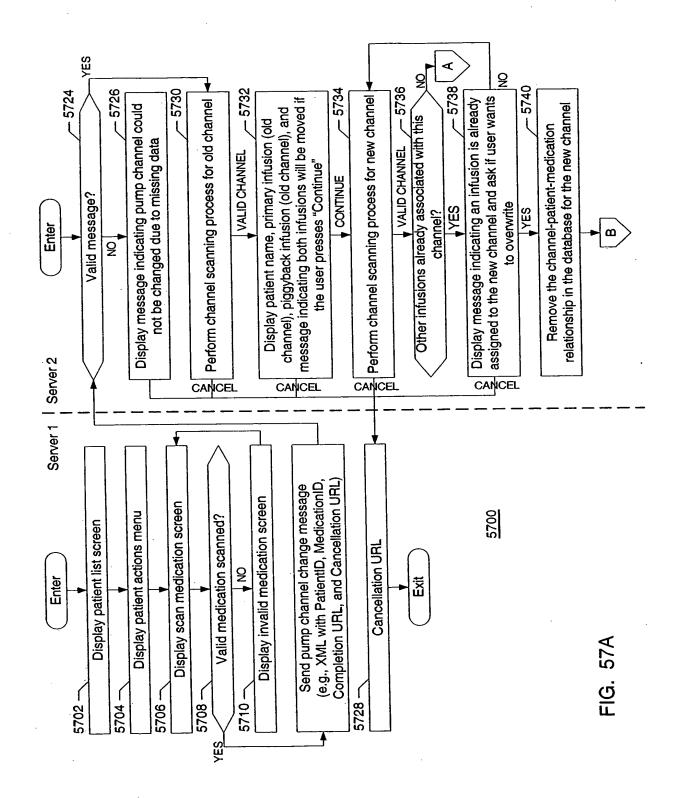
Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 44 of 59 Sheets

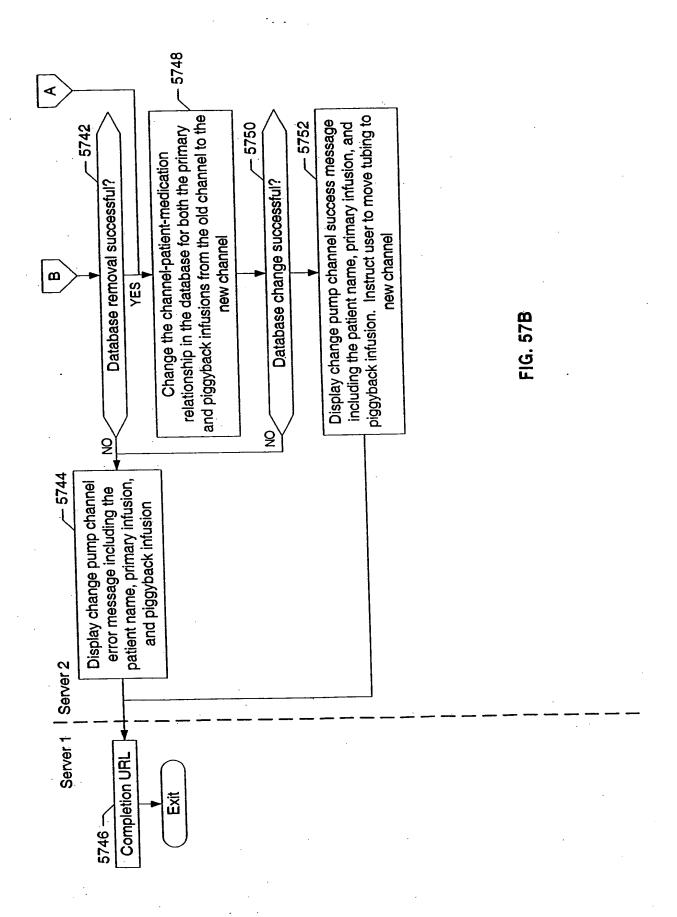
FIG. 55C



Title: Separation of Validated Information and Functions in a Healthcare System
Sheet 45 of 59 Sheets







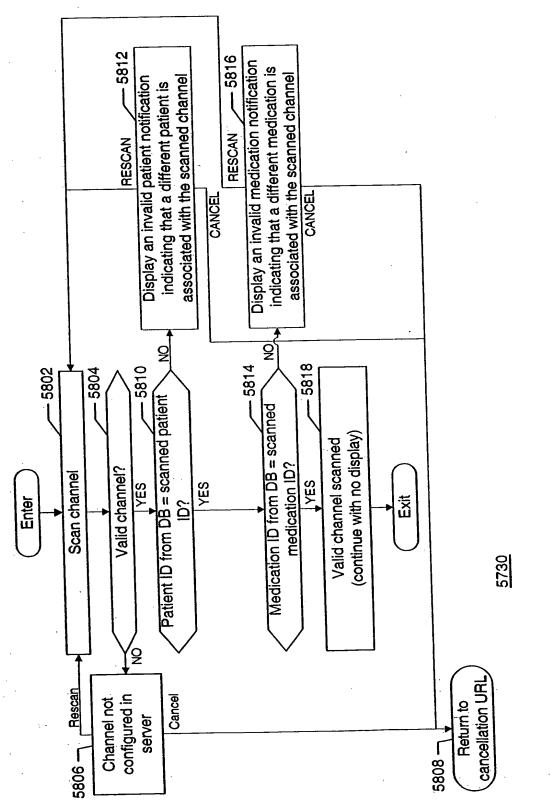
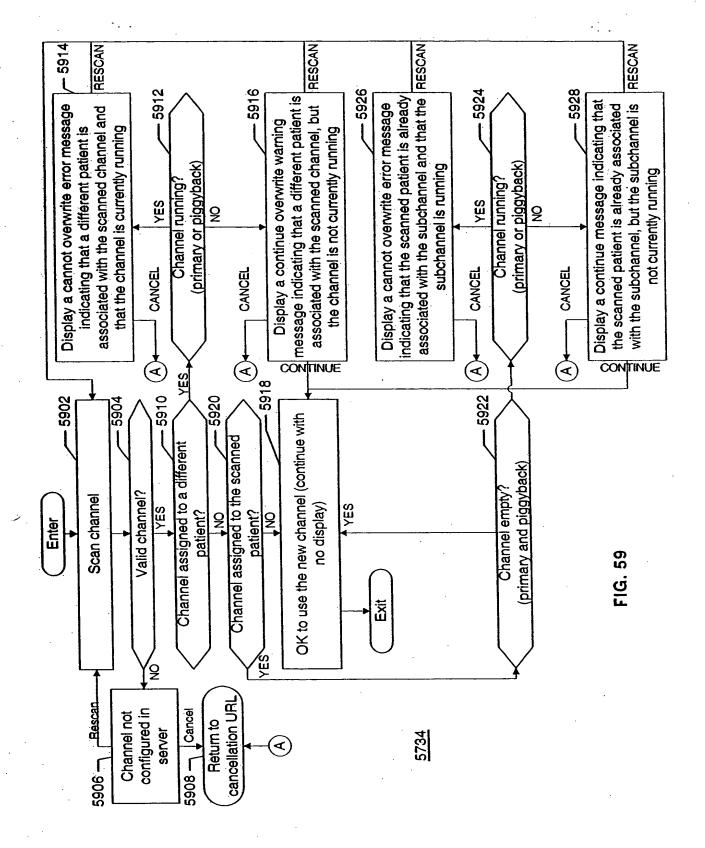
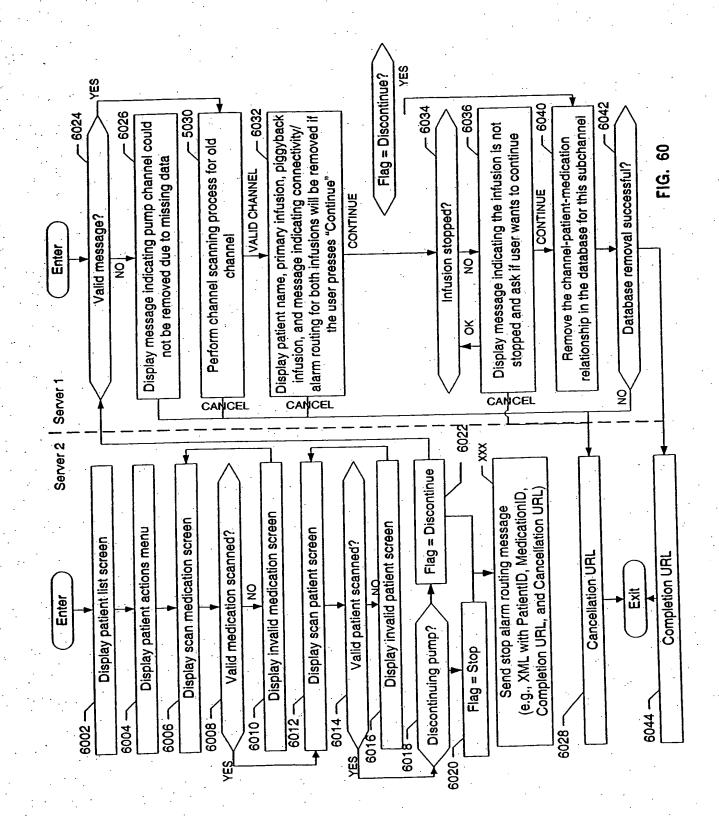
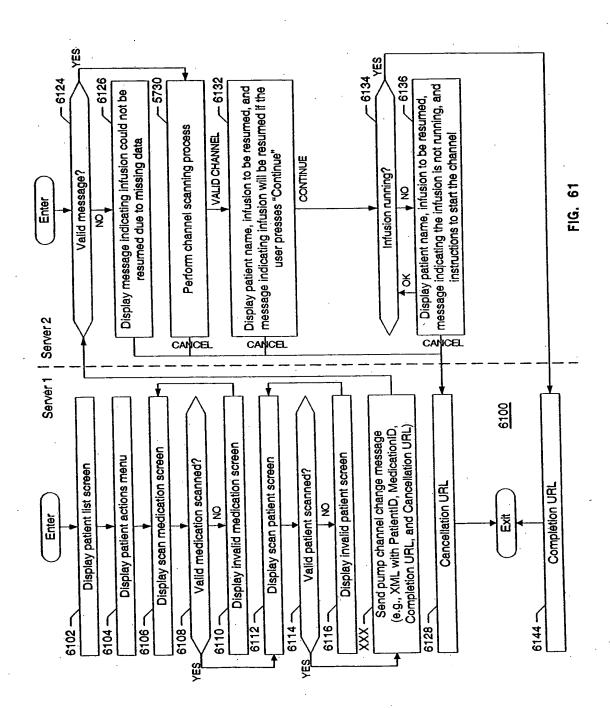


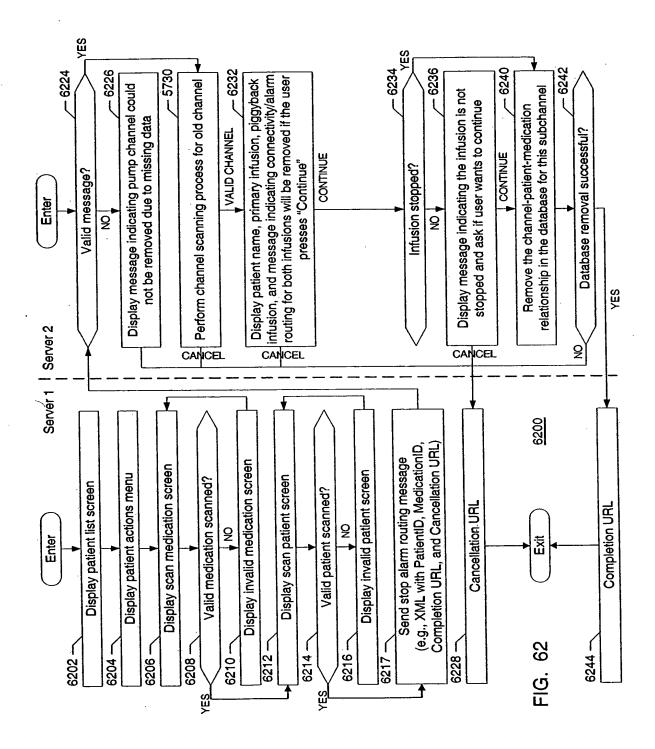
FIG. 58

Title: Separation of Validated Information and Functions in a Healthcare System



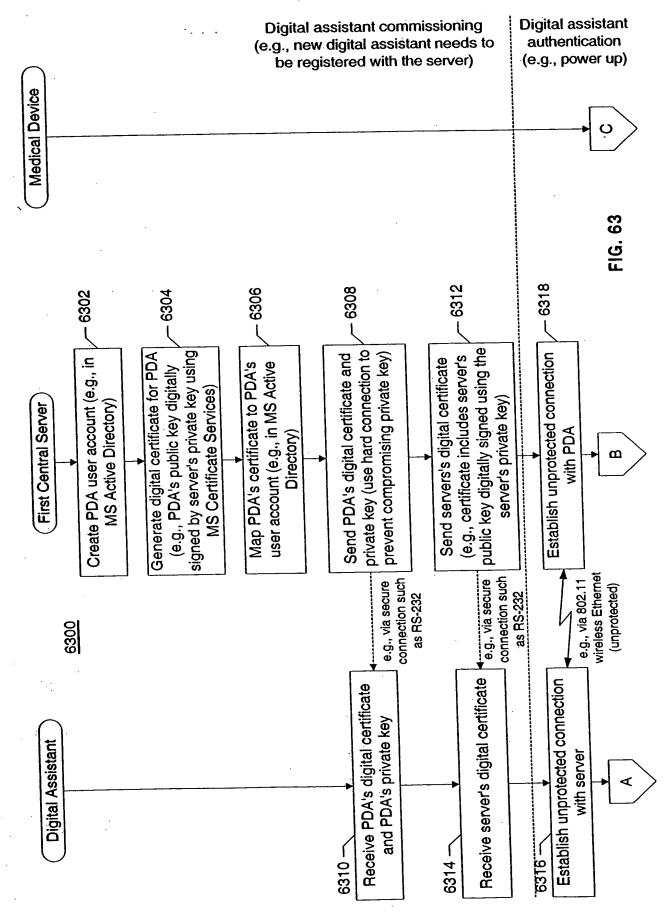




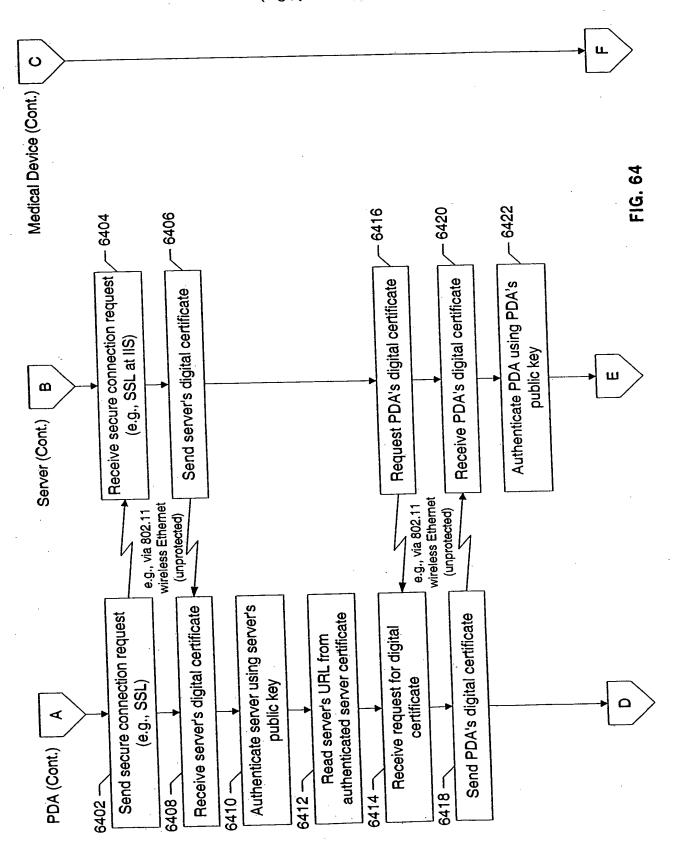


Title: Separation of Validated Information and Functions in a Healthcare System

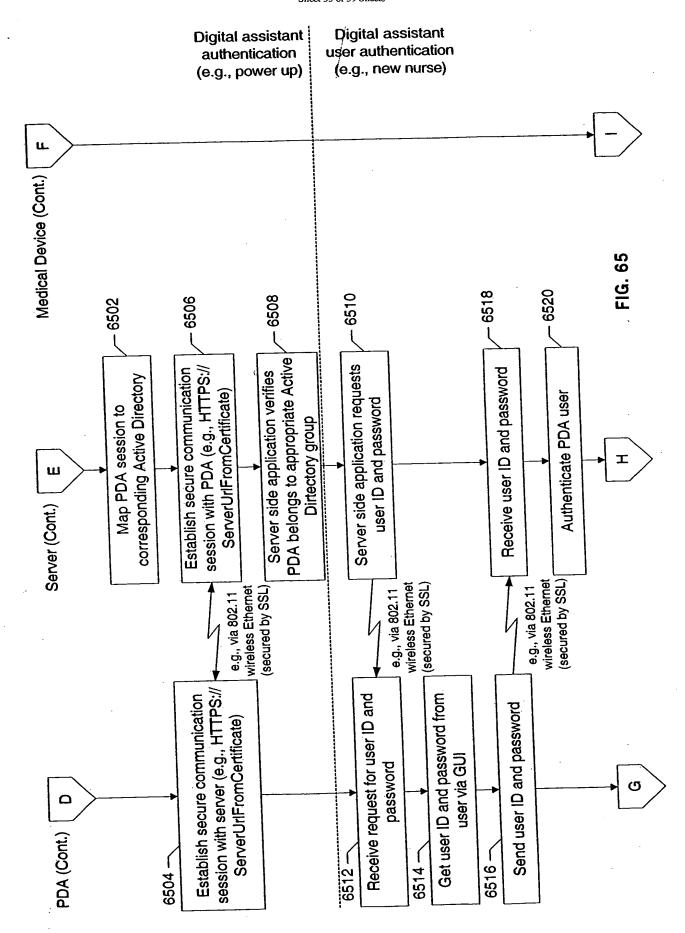
Sheet 53 of 59 Sheets



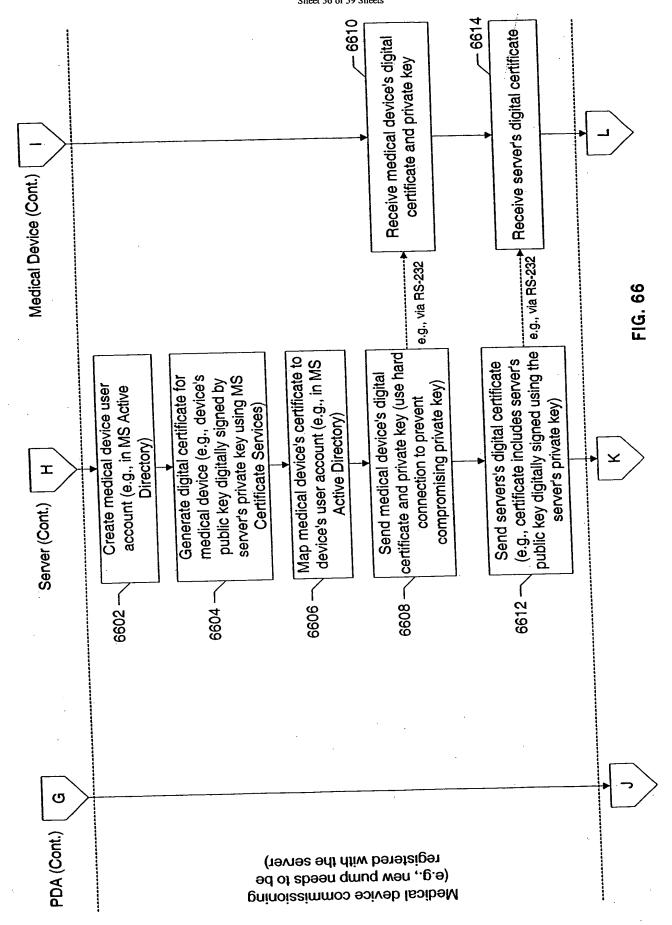
Digital assistant authentication (e.g., power up)

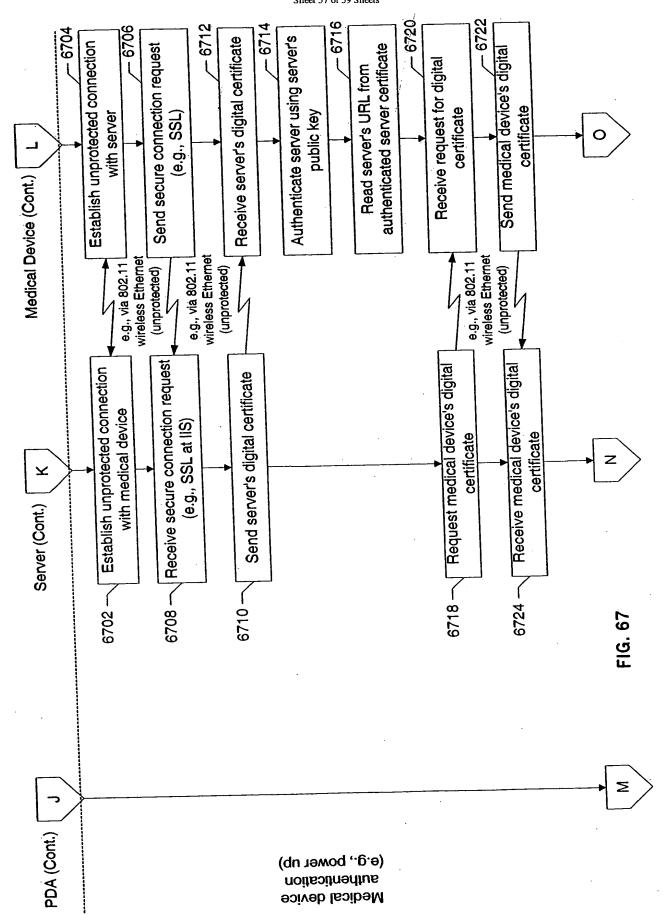


Title: Separation of Validated Information and Functions in a Healthcare System Sheet 55 of 59 Sheets



Title: Separation of Validated Information and Functions in a Healthcare System Sheet 56 of 59 Sheets





Title: Separation of Validated Information and Functions in a Healthcare System Sheet 58 of 59 Sheets - 6816 9089 681 session with server (e.g., HTTPS:// Establish secure communication Receive request for user ID and Get user ID and password from ServerUrlFromCertificate) password user Medical Device (Cont.) wireless Ethernet (secured by SSL e.g., via 802.11 wireless Etherne (secured by SSL e.g., via 802.11 PDA belongs to appropriate Active Server side application requests Authenticate medical device using session with PDA (e.g., HTTPS:// Establish secure communication Server side application verifies corresponding Active Directory medical device's public key ServerUrlFromCertificate) user ID and password Map PDA session to Dirtectory group Server (Cont.) 6812 -FIG. 68 **.** 8089 6810 6804 PDA (Cont.) (e.g., new nurse) (e.g., power up)

authentication

Medical device

user authentication

Medical device

